

## MINUTES OF DOT-AGC BRIDGE DESIGN SUBCOMMITTEE MEETING

The DOT-AGC Joint Bridge Design Subcommittee met on August 9<sup>th</sup>, 2006. Those in attendance were:

Berry Jenkins	Manager of Highway Heavy Division, Carolinas Branch AGC (Co-Chairman)
Greg Perfetti	State Bridge Design Engineer (Co-Chairman)
Mark Lively	Crowder Construction
Chris Britton	Taylor & Murphy Construction Co.
Greg Caniff	Rea Contracting, LLC
Ron Hancock	State Bridge Construction Engineer
Tom Koch	Structure Design Project Engineer
Paul Lambert	Structure Design Engineer
Scott Hidden	Support Services Supervisor - Geotech. Eng. Unit
Chris Krieder	Regional Operations Engineer - Geotech. Eng. Unit
Joseph Ishak	Project Engineer - Work Zone Traffic Control Unit
Gichuru Muchane	Structure Design Engineer

During the review of the June 11<sup>th</sup> meeting minutes, the following items were discussed:

### 1. *Increased Pile Tonnage Trial Projects*

Mr. Hidden informed the committee that as a result of changes in the letting schedule some of the trial projects previously identified to be let with the proposed increased pile tonnages have been postponed.

He noted that the Department would like to complete some increased tonnage trial projects before the policy is implemented. Therefore, Mr. Hidden has identified two additional projects to be let in early 2007 with the increased pile tonnage. The project details are as follows:

TIP	County	No. of Spans	Superstructure Type	Bent Type	Let Date
B-3621	Burke	3 (25'-50'-30')	Cored Slab	Drilled Shaft	2/07
B-4174	Lenoir	2 (50'-35')	Cored Slab	14" Piles	3/07

B-3621 will use 75-ton piles for the end bents, while B-4174 will use 75-ton piles for both the end bent and the interior bent.

Mr. Perfetti suggested investigating whether 12" piles would work for the interior bents on project B-4174.

The minutes of the June 11<sup>h</sup>, 2006 meeting were approved.

The following items of new business were discussed:

### 1. *Special Provision for Temporary Shoring, Selection Forms, and Std. Details*

Mr. Hancock sent a draft of the new temporary shoring provision, standard details, and forms to the committee in advance of the meeting. Mr. Hidden explained that with this new provision, the type of barrier and barrier location would no longer be shown on the Traffic Control Plans. The

Contractor will be responsible for choosing the type of barrier based on the shoring design, clear distance, offset, design speed, and pavement type.

Mr. Hidden worked through an example of how to determine the required concrete barrier type when using a temporary MSE wall, in accordance with the new Temporary Shoring Provision. He also noted that:

- The plans for traffic control will show the information necessary for the calculation to determine the type of concrete barrier required.
- The provision allows for an Oregon barrier in lieu of an anchored barrier. The Oregon barrier rail details will be available on the Traffic Control web site soon.
- Resident Engineers will review and file the standard shoring selection forms. When Standard Temporary Shoring is employed, the review process will be similar the current review and documentation process.
- At the Contractor's option or when the minimum required clear distance is not available, shoring will have to be designed for impact and barrier will be set against the back of the shoring..

Mr. Britton commented that the 2 ft. of required clear distance for concrete pavement and bridge approach slabs seems too much. It was later agreed that this would be revised to 1 ft.

*Post-meeting note:*

*After the meeting Mr. Hidden realized that during his example calculation he made an error in determining the offset distance. Mr. Hidden had used an offset as the distance from the centerline of the furthest traffic lane to the shoring. The provision defines the offset as the distance from the centerline of the furthest traffic lane to the front face of the barrier.*

## 2. Other

Mr. Hancock stated that the Department would be letting a drilled pier project with a micro-pile substructure alternate. He invited contractors with experience with micro piles to share any information on special considerations for micro-piles.

Mr. Hancock stated that some contractors have requested permission to install the elastomeric concrete headers and evazote joint seals well before the end of the project. Mr. Hancock stated that in general the joints and joint seals need to be installed at the end of the job to avoid damage from construction traffic. He noted that the elastomeric headers would reduce spalling of the concrete deck under construction traffic, but thought that the joint seal would be damaged.

Mr. Jenkins inquired if the Department will continue to bridge wetland buffer zones given the current budget situation. He suggested raising the issue with the regulatory agencies.

Mr. Jenkins stated that the AGC would increase the contractor representation on the AGC-DOT committee to 6 or 7 members.

## 3. Next Meeting

The next meeting is scheduled for October 11<sup>th</sup>, 2006 in the Structure Design Conference Room C.